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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/559,883	04/26/2000	Michael Freed	99,918	1786

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EXAMINER

JACOBS, LASHONDA T

ART UNIT PAPER NUMBER

2157

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/559,883	Applicant(s) FREED ET AL.	
	Examiner LaShonda T. Jacobs	Art Unit 2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on March 6, 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This Office Action is in response to Applicant's RCE Amendment filed on March 6, 2006.

Claims 1-2, 11-12 and 22-23 have been amended. Claims 1-8 and 10-29 are presented for further examination.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims **1-8** and **10-29** are rejected under 35 U.S.C. 102(e) as being anticipated by Lindsay (U.S. Pat. No. 6,564,267).

As per claim **1**, Lindsay discloses a method for changing a maximum segment size for a connection between a data source and a data receiver on a network comprising the steps of:

- receiving an announcement from said data receiver of a first connection between said source and said data receiver, wherein said announcement denotes a maximum segment size (abstract, col. 2, lines 24-40 and col. 5, lines 57-64); and

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- generating an altered announcement by changing said maximum segment size in said announcement of said first connection to a determined maximum segment size (col. 6, lines 45-65).
- wherein the determined maximum segment size reduces message fragmentation (col. 5, lines 49-64); and,
- forwarding the altered announcement to the data sender (col. 6, lines 8-20).

As per claim 2, Lindsay further discloses:

- recalculating a checksum of said announcement for use in the altered announcement (col. 6, lines 34-55).

As per claim 3, Lindsay discloses:

- wherein said announcement comprises a first message of a data stream in said connection (abstract, col. 2, lines 24-40 and col. 5, lines 57-64).

As per claim 6, Lindsay discloses:

- wherein changing said maximum segment size comprises changing said maximum segment size in a TCP header in said announcement (col. 5, lines 49-64).

As per claim 7, Lindsay discloses:

- wherein said determined maximum segment size is preprogrammed into a database (col. 8, lines 46-58).

As per claim 10, Mulligan discloses:

- wherein said determined maximum segment size avoid re-assembly of fragments (abstract, col. 2, lines 24-40 and col. 5, lines 57-64).

As per claim **11**, Lindsay discloses a method of reducing message fragmentation for a connection between a data source and a data receiver on a network comprising the steps of:

- receiving a first message fragment of a first connection between said data source and said data receiver (col. 6, lines 8-19); and
- storing a maximum segment size of said first message fragment of said first connection, wherein said maximum segment size exists in accordance with said first message fragment (abstract, col. 2, lines 24-40 and col. 5, lines 57-64);
- resetting said first connection, wherein resetting said first connection initiates a second connection (col. 8, lines 46-57); and
- receiving an announcement of said second connection (col. 8, lines 46-57) ; and
- generating an altered announcement of said second connection by placing said maximum segment size into an announcement of said second connection col. 6, lines 45-65); and
- forwarding the altered announcement to the data sender (col. 6, lines 8-20).

As per claim **12**, Lindsay further discloses:

- recalculating a checksum of said announcement of said second connection (col. 6, lines 34-55).

As per claim **13**, Lindsay discloses:

- wherein said first message fragment comprises a first message of a data stream in said connection (abstract, col. 2, lines 24-40 and col. 5, lines 57-64).

As per claims **4** and **14**, Lindsay discloses:

- wherein said announcement comprises a set SYN bit (col. 5, lines 57-64).

As per claims **5** and **15**, Lindsay discloses:

- wherein said first connection is one of any virtual connections utilizing TCP/IP between said data source and said data receiver (col. 6, lines 8-13).

As per claims **8** and **21**, Lindsay discloses:

- wherein said data source comprises customer premise equipment, and wherein data receiver comprises customer premise equipment (col. 4, lines 55-61).

As per claim **16**, Lindsay discloses:

- wherein said second connection is a connection following said first connection (col. 8, lines 46-58).

As per claim **17**, Lindsay discloses:

- wherein storing said maximum segment size comprises storing said maximum segment size in a database (col. 11, lines 25-36).

As per claim **18**, Mulligan discloses:

- wherein resetting said first connection comprises closing said first connection by setting a RST bit (col. 8, lines 46-57).

As per claim **19**, Lindsay discloses:

- wherein resetting said first connection initiates said second connection (col. 8, lines 46-57).

As per claim **20**, Lindsay discloses:

- wherein placing said maximum segment message size into said announcement of said second connection comprises placing said maximum segment message into a TCP header within said announcement of said second connection (col. 5, lines 57-64).

As per claim **22**, Lindsay discloses a method of reducing message fragmentation between the data source and the data receiver connected by a network comprising the steps of:

- intercepting a first announcement of a first connection between said data source and said data receiver (col. 2, lines 24-40); and
- predicting predicted maximum segment size of said first connection, wherein said predicted maximum segment size is placed in a signal (col. 5, lines 41-56);
- sending said signal with a no-fragment option set to said data source and said data receiver (col. 5, lines 41-56);
- storing a determined maximum segment size, whereupon said determined maximum segment size results from a fragment free signal response (col. 5, lines 56-64); and
- receiving subsequent announcements of connections and inserting said determined maximum segment into said subsequent announcements of connections between said data source and said data receiver (col. 11, lines 5-24).

As per claim **23**, Lindsay discloses:

- wherein said determined maximum segment size is iteratively predicted until a fragment free signal response is received (col. 8, lines 46-52 and col. 9, lines 7-21).

As per claim **24**, Lindsay discloses:

- wherein said no-fragment option is set in an IP header within said signal (col. 5, lines 41-56).

As per claim **25**, Lindsay discloses an apparatus for reducing message fragmentation between a data source and a data receiver connected by a network comprising:

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- a network device connected to the network, wherein said communications denote a maximum segment size for the network, wherein said network device changes the maximum segment size to a determined maximum segment size that is to be used in data transmission between said data source and said data receiver (col. 5, lines 48-64 and col. 6, lines 8-19); and
- a storage device connected to said network device for storing said determined maximum segment size for data transmitted between said data source and said data receiver; wherein said network device stores said determined maximum segment sizes in accordance to data communication between said data source and data receiver (col. 5, lines 48-64 and col. 6, lines 8-19).

As per claim **26**, Lindsay discloses:

- wherein said announcement comprises a first message (abstract, col. 2, lines 24-40 and col. 5, lines 57-64); and
- wherein said first message comprises a set SYN bit (col. 5, lines 57-64).

As per claim **27**, Lindsay discloses:

- wherein the network device iteratively predicts said determined maximum segment size (col. 5, lines 41-56).

As per claim **28**, Lindsay discloses:

- wherein said storage device comprises a database (col. 8, lines 46-58).

As per claim **29**, Lindsay discloses:

- wherein said network device comprises a gateway device (col. 4, lines 55-65).

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Response to Arguments

3. Applicant's arguments with respect to claims 1-8 and 10-29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaShonda T. Jacobs whose telephone number is 571-272-4004.

The examiner can normally be reached on 8:30 A.M.-5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LaShonda T Jacobs
Examiner
Art Unit 2157

ltj
May 10, 2006


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